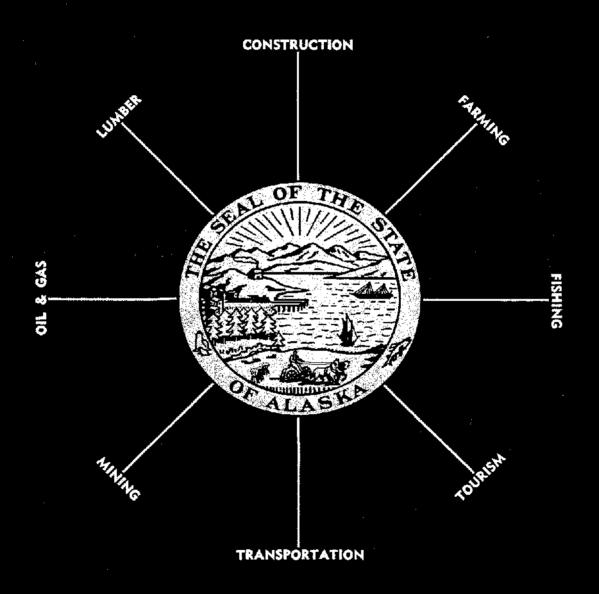
PUBLIC EMPLOYEES RETIREMENT SYSTEM

TEACHERS RETIREMENT SYSTEM



JAY S. HAMMOND

GOVERNOR

PUBLIC EMPLOYEES' RETIREMENT FUND TEACHERS' RETIREMENT FUND Fiscal Year 1977

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RETIREMENT FUNDS Introduction

GENERAL COMMENTS

The information presented in this report shows the results of operations and the financial condition of the two retirement funds for the fiscal year ending June 30, 1977.

The assets accumulated by these funds are used to provide retirement benefits for the members of the Public Employees' Retirement System and the Teachers' Retirement System.

Assets of the Public Employees' Retirement Fund total \$190,954,572 as of June 30, 1977, an increase of \$48,965,928 over the preceding fiscal year. Assets of the Teachers' Retirement Fund amount to \$177,345,467 as of June 30, 1977, an increase of \$39,722,085 over the preceding fiscal year. The combined assets of both funds total \$368,300,039.

Both the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS) are joint contributory systems with defined contributions and benefits. In PERS, peace officers and firemen contribute 5 percent and all other members contribute 4.25 percent of gross pay. Employer contribution rates in FY 1977 averaged 10.35 percent of gross pay in comparison with 7.63 percent in FY 1976 and with 10.61 percent in the coming FY 1978. Under TRS, members contribute 7 percent of base salary. The combined TRS employer and State Matching Contributions for fiscal year 1977 amounted to 14.18 percent of gross pay.

As of June 30, 1977 there were 64 participating employers and approximately 15,800 active members in the PERS. There were 59 participating employers and approximately 6,540 active members in the TRS.

During FY 1977, interest at the rate of 4 1/2 percent per annum was credited to TRS employees' accounts. This interest totaled \$2,492,824 as compared with the \$2,069,390 credited the year before. Members of the PERS earned interest at the rate of 2 1/4 percent compounded semiannually for a total of \$1,860,874 compared with \$1,464,813 credited during the previous fiscal year.

On June 30, 1977 there were 1,672 persons receiving retirement benefits under the PERS as compared with 1,104 a year earlier and 852 persons receiving retirement benefits under the TRS as compared with 684 a year ago. This represents an increase of 51 percent for PERS recipients and 25 percent for TRS recipients.

During the fiscal year ending June 30, 1977, retirement benefits in the amount of \$7,607,162 were paid to PERS recipients, an increase of 57 percent above the \$4,842,542 paid out a year earlier. Fiscal year 1977 retirement benefits for TRS recipients were \$8,161,421, an increase of 28 percent over the \$6,390,012 paid the year before.

The average annual benefit received by PERS retirees was approximately \$4,550, whereas the average amount received by TRS retirees was approximately \$9,579. Similar averages for fiscal year 1976 were \$4,386 for PERS and \$9,342 for TRS.

INVESTMENT COMMENTS

The economy of the United States during the fiscal year ending in June. 1977, continued to expand at a very healthy pace. Although the real growth in GNP in the first half was only 2.5 percent due to a major strike of the Ford Motor Co., it rebounded in the second half to over 6-1/2 percent real growth. The economic expansion has been very broad based with consumer spending leading the way. Combined with this increase in consumer spending, there has also been a very rapid expansion in the housing and automobile industries. Actually, the only sector that has been a laggard in this economic expansion is business expenditures on new plant and equipment, but it is widely expected that this sector will be expanding at a greater rate in the next year. By allowing the monetary aggregates to expand at a fairly rapid rate, the Federal Reserve Bank has provided the major impetus behind this economic expansion. This sharp increase in money supply has greatly enhanced both the consumer and the business community's financial position. This increased liquidity in the system has enabled the consumer to increase his rate of spending while also allowing for an internally financed expansion by the corporate community. The capital markets responded to these developments favorably in the first half of the year but this trend reversed itself in the second half as the markets began to anticipate reduced liquidity and a higher inflation rate.

Due to the narrow yield spreads between the lower quality securities and very high quality securities, the Treasury Division investment strategy was to reduce market risk in the portfolio by swapping into higher quality securities with shorter maturities. This was done to insure preservation of principal in a period that has exhibited a high degree of volatility in the capital markets. This basically defensive investment strategy has been maintained throughout most of the second half of the fiscal year.

During the year increased emphasis was placed on investments in Alaska mortgages. A total of \$63,000,000 was invested in mortgages for the two retirement systems. Scheduled repayments and prepayings amounted to \$14,300,000 for a net increase of \$48,700,000 in the mortgage portfolios. Rates received on the new purchases ranged from 9-1/2 percent to 10-3/4 percent. The average yield on mortgage investments was 9.37 percent.

The Treasury Division evaluates investment results using performance measurement techniques developed by the Bank Administration Institute. One of these measurements, called time-weighted rate of return which reflects both changes to market value and income, is used to gauge the performance of Alaska's retirement funds in relationship to other funds similarly measured.

In fiscal year 1977, the Public Employees' and Teachers' Retirement Funds achieved a total return of 10.49 percent and 11.53 percent, respectively. These results reflect a continuing recovery of market value in the fixed income segments of each portfolio.

The following table displays the returns achieved on the various portions of each of the two Statewide retirement funds as well as the comparable returns of the median and top quarter of the population of funds measured by the A. G. Becker Securities Corporation.

Fixed Income Common Stock Total Fund	Public E Time Weight Income 8.03 3.10 7.36	Imployees' Retiremented Percentage Rate Appreciation 4.61 -3.97 3.13	nt Funds s of Return Total 12.64 -0.87 10.49
Fixed Income Common Stock Total Fund	Tea Time Weigh Income 8.17 3.19 7.41	chers' Retirement F ted Percentage Rate Appreciation 4.83 1.08 4.12	13.00 4.27 11.53
Fixed Income Common Stock Total Fund	Top 25% Fund 12.20 2.30 6.80	Median Fund 10.40 -2.60 2.30	

Indices

Standard and Poor's 500 Stock Average	0.60% 15.10%
Corporate Bond Index, Kuhn Loeb	10.10.0

The following tables display the cumulative time-weighted rates of return for the past four years for each retirement fund.

Public Employees' Retirement Fund Annually Compounded Time-Weighted Rates of Return

	<u>1977</u>	<u>1976</u>	1975	1 <u>974</u>
First Year Second Year Third Year Fourth Year	10.49 9.38 9.92 6.08	8.27 9.64 4.65	11.02 2.89	-4.65

Teachers' Retirement Fund
Annually Compounded
Time-Weighted Rates of Return

·	<u>1977</u>	<u>1976</u>	<u>1975</u>	<u> 1974</u>
First Year Second Year Third Year Fourth Year	11.53 10.07 11.35 7.35	8.62 11.27 5.99	13.98 4 69	-3.83

An important difference between the time-weighted return calculation and the more traditional approach often called the realized income or accounting income method is the treatment of gains and losses in the market value of securities. The accounting or realized income approach recognizes capital gains or losses only at the time securities are sold or mature. This method is used to calculate the net income reported on the funds operating statement.

The time-weighted rate of return measurement in contrast reflects the portfolio's unrealized changes in market value over the year. The gain or loss in market value is evaluated monthly by the performance measuring system and is calculated as a positive or negative percentage. These monthly rates are combined to form annual and compound annual returns.

Over a long period of time these different calculations of rates of return should produce similar results. However, for annual periods and particularly during periods of high inflation the time-weighted return more accurately reflects actual investment results.

RETIREMENT FUNDS Combined Balance Sheet June 30, 1977

ASSETS	<u>Total</u>	Public Employees' Retirement Fund	Teachers' Retirement Fund
Current Assets			
Investments: Short Term Debt Issues Fixed Income Marketable Loans and Mortgages Common Stock Account Total Investments	\$ 3,414,428 163,793,475 136,671,351 53,788,243 \$357,667,497	\$ 2,252,428 84,028,174 74,729,682 26,033,871 \$187,044,155	\$ 1,162,000 79,765,301 61,941,669 27,754,372 \$170,623,342
Other Current Assets: Savings Deposits Cash Pending Permanent	\$ 6,173,087	\$ 3,331,940 \$ 578,477	\$ 2,841,147 \$ 3,880,978
Investment	\$ 4,459,455		
Total Other Current Assets	\$ 10,632,542	\$ 3,910,417	
Total Current Assets	\$368,300,039	\$190,954,572	\$177,345,467
EQUITIES AND RESERVE			
Equities: Employees Equities Employers Equities Total Equities	\$117,365,373 108,588,343 \$225,953,716	\$ 46,029,622 100,935,500 \$146,965,122	\$ 71,335,751
Retirement Reserve	\$142,346,323	\$ 43,989,450	\$ 98,356,873
Total Equities and Reserve	\$368,300,039	\$190,954,572	\$177,345,467

RETIREMENT FUNDS Combined Statement of Operations For Fiscal Year Ended June 30, 1977

	Total	Public Employees Retirement Fund	Teachers' Retirement Fund
Beginning Equities and Reserve July 1, 1976	\$279,612,026	\$141,988,644	\$137,623,382
Additions: Employees' Contributions Employers' Contributions Interest Earned on Indebtedness Net Investment Income	25,559,315 58,911,412 502,452 26,186,043	13,396,432 34,881,182 42,106 12,602,465	12,162,883 24,030,230 460,346 13,583,578
Total Additions	\$111,159,222	\$ 60,922,185	\$ 50,237,037
Beginning Balances and Additions	\$390,771,248	\$202,910,829	\$187,860,419
		•	
Deductions: Administrative Expenses Employees' Contributions	\$ 1,026,049	\$ 532,347	\$ 493,702
and Interest Refunded Retirement Benefits Paid	5,676,577 15,768,583	3,816,748 7,607,162	1,859,829 8,161,421
Total Deductions	\$ 22,471,209	\$ 11,956,257	\$ 10,514,952
Ending Equities and Reserve, June 30, 1977	\$368,300,039	\$190,954,572	\$177,345,467

PUBLIC EMPLOYEES' RETIREMENT FUND

BOARD MEMBERS

Name

C.R. "Steve" Hafling, Chairman

Robert L. Anderson

Ronald M. Henry

Norman J. Levesque

Morgan W. Reed

Term Expires

June 20, 1978

December 14, 1978

June 20, 1982 ·

October 26, 1977

June 20, 1980

September 16, 1977

Board of Directors State of Alaska Public Employees Retirement System Juneau, Alaska

We have examined the statements of assets and equity arising from cash transactions of the State of Alaska Public Employees Retirement System as of June 30, 1977 and 1976, and the related statements of changes in equity arising from cash transactions for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Cash and investment accounts at June 30, 1977 and 1976 were confirmed by direct communication with the depositaries, custodians and servicing financial institutions.

As described in Note A, the System's policy is to prepare its financial statements on the basis of cash receipts and disbursements. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly the assets and equity arising from cash transactions of the State of Alaska Public Employees Retirement System as of June 30, 1977 and 1976, and the changes in equity arising from cash transactions for the years then ended, on the basis of accounting described in Note A, which basis has been consistently applied.

Certified Public Accountants

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STATEMENTS OF ASSETS AND EQUITY ARISING FROM CASH TRANSACTIONS

	June	30,
	<u> 1977</u>	1976
<u>ASSETS</u>		
Cash	\$ 578,477	\$ 355,235
Certificates of deposit and savings accounts	4,233,569	1,208,807
Bonds, notes and debentures: United States Government, at cost		
(market \$65,178,673 in 1977 and \$45,945,516 in 1976)	63,855,756	45,666,027
Other, at cost (market \$31,450,689 in 1977 and \$35,665,800 in 1976)	30,806,498	35,521,942
Common stocks, at cost (market \$17,455,313 in 1977 and \$21,097,341 in 1976) Real estate mortgages and SBA loans	16,750,590 74,729,682	20,672,908 38,563,725
	\$190,954,572	<u>\$141,988,644</u>
EQUITY		
Equity	<u>\$190,954,572</u>	<u>\$141,988,644</u>

STATEMENTS OF CHANGES IN EQUITY ARISING FROM CASH TRANSACTIONS

	Year ende	d June 30,
	<u>1977</u>	<u>1976</u>
Balance at beginning of year	\$141,988,644	\$107,556,336
Additions during the year: Employer contributions Employee contributions Investment income	34,881,182 13,438,538 12,602,465 60,922,185	22,712,558 12,369,538 8,367,857 43,449,953
Deductions during the year: Refunds to terminating members Retirement benefits paid Administrative expenses	3,816,748 7,607,162 532,347	3,758,719 4,842,542 416,384
	11,956,257	9,017,645
Balance at end of year	<u>\$190,954,572</u>	<u>\$141,988,644</u>

NOTES TO FINANCIAL STATEMENTS YEARS ENDED JUNE 30, 1977 AND 1976

NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The State of Alaska Public Employees Retirement System, established January 1, 1961, is a contributory pension system covering substantially all full-time employees of the State of Alaska. In addition, employees of participating political subdivisions are included in the System. A separate retirement system covers teachers. Elected officials may participate in the System at their option.

Investments are stated at cost. Investment income consists of interest, dividends and the gain or loss on disposition of investments, which is the difference between the acquisition cost and the net sales proceeds.

The System maintains its records, and the financial statements are prepared, on the cash basis of accounting.

Contributions, interest and dividends, retirement benefits, refunds to terminating members and administrative expenses are recorded when cash is received or disbursed. Deferred discount or premium on mortgages is amortized over the terms of the mortgages.

NOTE B - DESCRIPTION OF THE SYSTEM:

Peace officers and firemen contribute 5% of gross pay to the System; other members contribute 4-1/4%. Members earn interest on their contributions at the rate of 2-1/4%, credited semiannually. Employers contribute at actuarially determined rates which are estimated to be sufficient to annually fund current service costs and fund prior service costs over 40 years.

Peace officers and firemen are entitled to full retirement benefits upon completion of 20 years of service or at age 55. Other participants may retire at age 55 with at least five years of service or at any age with at least 30 years of service. All members of the System may take early retirement as defined in the System with reduced benefits. Upon termination, member contributions are refundable with accrued interest. All retirees receive a minimum monthly benefit of \$17.50 for each year of credited service.

NOTE C - ACTUARIAL METHOD:

The employer contribution rates are determined actuarially on the basis of the aggregate method with supplemental liability.

Significant actuarial assumptions affecting employer funding rates are: 5% investment yield and salary escalation of 5% per year. Assets are valued at cost.

The increase in the actuarially determined unfunded prior service liability, from \$52,600,000 in 1976 to \$77,132,000 in 1977, arises from legislation which reduced retirement ages and retroactively increased benefits.

ADDITIONAL INFORMATION

The additional information presented in the following pages has been taken from the accounting and other records of the System and has been subjected to the tests and other auditing procedures applied in the examination of the financial statements for the year ended June 30, 1977. In our opinion, such information is fairly presented in all material respects in relation to the financial statements taken as a whole although it is not necessary for a fair presentation of the System's assets and equity or changes in equity arising from cash transactions.

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Certified Public Accountants

DETAILS OF INVESTED FUNDS

	Maturity <u>date</u>	Cost	Interest <u>rate</u>
CERTIFICATES OF DEPOSIT AND SAVINGS ACCOUNTS:			
Certificates of deposit - Arctic First Federal Savings and Loan	J10/25/77	\$ 100,000	7.50
Arctic First Federal Savings and Loan	5/01/78	200,000	7.50
Arctic First Federal Savings and Loan	2/15/79	150,000	7.50
Arctic First Federal Savings and Loan First Federal Savings and Loan First Federal Savings and Loan	2/15/80 /7/11/77 7/10/78	100,000 114,000 100,000	7.50
		764,000	<u>!</u>
Sayings accounts - Bank of California National Bank of Alaska		73,331,940 137,629	5.00
		3,469,569 \$4,233,569	

STATE OF ALASKA PUBLIC EMPLOYEES RETIREMENT SYSTEM

DETAILS OF INVESTED FUNDS (continued)

Net yield	5,960 6,520 6,990 7,800 7,888 7,888 8,270	8.672	7.869 7.799 7.799 7.799 7.853 7.853 7.815 7.787 7.818 7.818 7.818 7.818 7.818 7.818 8.137 8.137 8.137 8.137
Market value	\$ 1,000,000 1,002,000 1,011,000 1,001,300 2,025,625 2,096,250 1,066,250	9,526,563	380,590 811,439 906,007 392,845 470,624 964,059 970,932 1,448,753 965,827 986,119 967,798 483,262 967,188 1,934,375 986,119 986,119 986,119 986,119 986,188 483,262 946,483 481,459 949,438 448,596 448,596
Cost	\$ 1,000,525 996,780 1,001,719 977,500 2,005,000 1,996,724 997,500	8,829,922	368,112 879,255 879,255 383,383 456,055 951,911 958,697 960,293 481,232 977 960,293 481,232 977 986,946 472,886 986,946 977 978,886 986,946 472,889 923,864 923,864
Par value	\$ 1,000,000 1,000,000 1,000,000 2,000,000 2,000,000 1,000,000	8,750,000	399,570 851,905 951,188 412,436 494,093 996,766 1,003,872 1,497,903 1,000,631 1,000,631 1,000,631 1,024,507 1,024,507 1,024,507 1,024,507 1,024,507 1,024,507 1,024,507
Maturity date	3/31/79 2/15/80 5/15/82 2/15/07 11/15/81 11/15/82 5/15/05	10/21/85	11/15/04 2/15/05 6/15/05 8/15/05 11/15/05 2/15/07 3/15/07 3/15/07 6/15/07 6/15/07 6/15/07 6/15/05 12/15/05 12/15/05
Interest	6.00 6.50 7.00 7.625 7.875 8.250	8.800	7.250 7.250 7.250 7.250 7.250 7.500 7.500 7.500 7.500 8.000 8.000 8.000
JUNE 30, 1977	U. S. Treasury Notes & Bonds - U. S. Treasury Notes U. S. Treasury Bonds	U. S. agencies - Twelve Federal Land Banks	GNMA mortgage-backed securities - Pool #5153 Pool #5183 Pool #7209 Pool #7209 Pool #14296 Pool #16487 Pool #16487 Pool #16487 Pool #15864 Pool #15969 Pool #16140 Pool #5135 Pool #5135 Pool #5135

STATE OF ALASKA
PUBLIC EMPLOYEES RETIREMENT SYSTEM

DETAILS OF INVESTED FUNDS (continued)

	e er	i i	สะ หลใบ	Cost	Market	e rt
	rate	date	Par value	Cost	value	e le
UNITED STATES GOVERNMENT (continued):						
GNMA mortgage-backed securities (continued) -						
Balance brought forward			\$18,917,288	\$18,092,317	\$18,342,824	
7 CO C E		71.5	05.98	15.6	06.	8.41
FOOT #11039		$\frac{15}{15}$	958,358	926,014	959,257	8.27
		Ξ:	76,24	5. 2.	~ (~ (7.0
		7	61,83 7,75	ມ ວັດ ໝົວ	ă, c	7 70
POOL #1144/		<u> </u>	010.76	017.0	Ξ,	7.95
		\tilde{z}	,83	978,5	,983,	8.03
		75	33	4.1	1	7.96
		7.5	1,002,705	بلت	1,003,645	
Pool #12569		27.6	χ, ~. ς	χņν	_	20.0
		7.	70 96	9 0	20	8.26
		7.	90,65	, w	Ô	8.38
FOOT #4201		13	86,85	89,0	, 68	8.28
		2/15	75,52	98,	တ် တ	8.26
		0/15	58,91	20. 20.	20	χ. ο
Fool #7216		7.7.5	50,00 50,00	20,77	າ ວິດ	8 24
		2/15	73,91	86.	100	8.27
		75	9,6	, 0,	'n	8.23
		2/15	20,84	4,4	Ļ,	8.28
		2/15	71,14	02,1	90	233
		7	94,31	90.	- C	27. 20.0
		7,	20,000	ν. Σ	776	00.00
		7;	77,00	77.0	7 V	2.0
		7	10,000 10,000 10,000	10	90	, a
Pool #7138			אים, וויף מיה הים	900	60	27.80
7.001 2001.		15	. X	, 77	76	8.27
FOOL **64.54 55.57 **88.77		7.	98,86	50	E	8.38
2001 # 1005		=	95,78		10	∞ ·
		7	59,37	484,	472	ω. Ο.
Pool #10744	8.500	4/15/06 5/15/06	982,1 98 999,158	1,030,080	1,028,508	8.105
			6	200	11	
Balance carried forward			41,297,973	40,807,873	41,187,298	

	SYSTEM	
OF ALASKA	DETTYPMENT	1000 1000
STATE	DANO AUGH	LIVE LAST 21-4
		PUBLIC

DETAILS OF INVESTED FUNDS (continued)

HWE 30, 19

et yield	8.066 8.288 8.308	9.547 8.823 9.040 9.040 9.283 9.029 8.029 8.029 8.157 8.157 8.157 8.157
Market value	244,941 1,935,448 512,613 2,569,385 46,449,685	\$ 1,356,250 1,287,500 1,055,000 1,067,500 525,000 1,907,500 2,150,000 1,578,750 1,020,000 1,691,250 1,026,250 1,503,750 1,503,750 1,503,750 253,438 1,503,750 253,438
Cost	\$40,807,873 \$ 250,741 1,928,398 2,553,785 46,049,986	\$ 1,243,750 1,261,875 1,988,590 1,020,000 1,838,125 493,750 500,000 1,027,500 1,027,500 1,041,540 1,672,500 1,672,500 1,673,750 1,444,150 1,473,750 1,473,750 1,486,875 1,486,875 1,486,875
Par value	\$41,297,973 \$\\ 237,952 \\ 1,880,217 \\ 497,985 \\ 2,496,063 \\ 46,410,190 \\ \$\\ 564,160,190 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	\$ 1,250,000 1,000,000 1,000,000 1,000,000 1,750,000 2,000,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000 1,500,000
Maturity date	8/15/06 2/15/07 2/15/07 3/15/07	6/01/85 2/01/95 7/15/95 4/01/99 4/15/99 12/01/99 8/15/01 5/01/01 5/01/01 5/01/02 8/15/16 3/15/17 5/01/17
Interest	8.500 8.500 8.500	9.500 9.600 8.875 9.000 9.750 10.000 8.250 8.750 8.750 8.125 8.125
JUNE 30, 1977	UNITED STATES COVERNMENT (continued): GNMA mortgage-backed securities (continued) - Balance brought forward Pool #12368 Pool #17046 Pool #17046	Corporate notes and bonds - Pacific Gas & Electric Co., 1st Ref. Mtg. Series 75A Montgomery Ward Credit Corp. Penney, J. C., Inc. Diamond Shamrock Corp. Pfizer, Inc. Schio/BP Trans Alaska Pipeline Pfizer, Inc. Ashland Oil, Inc. Exxon Corp. Exxon Corp. General Electric Commonwealth Edison Kountain States Telephone Illinois Bell Telephone Illinois Bell Telephone New Jersey Bell Telephone New Jersey Bell Telephone Northwestern Bell Telephone Southern Bell Telephone

STATE OF ALASKA PUBLIC EMPLOYEES RETIREMENT SYSTEM

DETAILS OF INVESTED FUNDS (continued)

Interest Maturity rate date Pa	OTHER BONDS, NOTES AND DEBENTURES (continued):	G.M.A.C. G.M.A.C. Montgomery Ward Co. Ford Motor Credit Co. Wells Fargo & Co. 5.375 7/01/77 \$ 1 5.125 7/05/77 1 5.126 7/11/77 1 5.300 7/18/77 1 5.300 7/18/77 1	5.240 7/11/77	Other - 7.750 12/15/77 1 M.G.I.C. Mortgage Corporation 10.500 9/15/91 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Par value Cost		1,000,000 \$ 995,521 1,000,000 1,094,867 1,100,000 1,094,867 920,000 1,164,832	1,500,000 1,488,428 6,690,000 6,657,456	1,000,000 1,700,000 1,700,000 330,390,000 1,000,000 1,000,000
Market value	-	\$ 995,521 1,094,867 915,801 1,164,832	1,497,598	1,000,000 1,700,000 1,700,000
Net yield		5.375 5.125 5.250 5.300 5.300	5,281	7.750

DETAILS OF INVESTED FUNDS (continued)

			Market
	Shares	Cost	<u>value</u>
COMMON STOCKS:			:
Alcan Aluminum Ltd. American Broadcasting American Home Products American Hospital Supply Atlantic Richfield Avon Products Baker Intl. Corp. Beatrice Foods Co. Boeing Company Boise Cascade Corp. Bucyrus-Erie Co. CBS, Inc. Continental Oil Co. Cooper Industries, Inc. Dresser Industries, Inc. DuPont E. I. DeNemours Exxon Corporation Georgia-Pacific Getty Oil Company Harnischfeger Corp. Houston Industries IBM Kaiser Alu. & Chemical Koppers Company MGIC Investments Merck and Company Missouri Pacific Corp. Montana Power Company Owens-Corning Fiberglass Republic Steel Corp. Safeco Corporation Schlumberger, Ltd. Standard Oil Co. of California Standard Oil Co. of Ohio Stauffer Chemical Co. Sundstrand Corporation Texas Instruments Union Pacific Corp. Whirlpool Corporation	10,000 20,000 10,000 10,000 14,000 20,000 2,700 15,000 10,000 1,200 15,000 20,400 3,000 1,200 15,000 20,400 3,000 12,000 4,000 5,500 6,000 12,	\$ 235,675 768,323 392,160 376,735 693,222 412,691 537,397 482,735 244,500 521,767 356,350 500,450 128,475 201,825 689,181 558,764 585,990 209,659 128,560 1,290,273 217,140 535,106 \$535,821 278,206 587,995 407,845 524,756 161,201 410,000 278,197 387,250 385,837 312,650 697,682 193,293 793,215 106,058	-251,250 847,000 505,000 634,500 495,000 156,262 -420,000 225,000 529,875 -338,750 552,000 137,250 -139,200 802,500 614,250 -208,800 135,500 1452,000 223,500 540,500 -195,125 720,000 434,600 -523,575 -140,000 468,750 308,250 417,500 532,500 -254,313 815,001 -134,812 916,000
		\$16,750,590	\$17,455,313

DETAILS OF INVESTED FUNDS (continued)

	Interest rate	Par value	Cost	Net yield
REAL ESTATE MORTGAGES AND SBA LOANS:				
FHA mortgages serviced by Alaska Mutual Savings Bank, Anchorage Alaska Mutual Savings Bank, Anchorage Alaska Mutual Savings Bank, Anchorage Alaska National Bank of Fairbanks Alaska National Bank of Fairbanks Alaska National Bank of Fairbanks Alaska State Bank, Anchorage First National Bank of Anchorage National Bank of Alaska, Anchorage Rainier Mortgage Company, Anchorage	6.75 7.50 8.50 7.50 8.50 8.50 6.75 7.50 8.50 7.50 8.50 5.25 5.75 7.50 8.50 8.50 7.50 8.50 7.50 8.50 7.50 8.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7	\$ 89,750 553,082 105,364 99,094 273,241 292,084 228,963 345,562 55,650 1,580,275 31,477 436,419 37,256 176,589 255,609 421,920 48,307 29,540 361,202 712,799 240,654 441,204 237,031 103,924 29,158 633,172 699,968 57,289 489,045 25,636 175,058 135,683 901,432 250,631 929,096	\$ 84,356 522,663 105,364 99,094 273,241 288,287 217,515 332,327 52,306 1,497,310 30,832 416,039 37,908 186,390 402,512 46,858 29,983 340,975 666,325 228,622 430,725 228,736 101,846 265,670 567,714 665,670 56,487 480,438 24,354 168,055 130,486 857,262 234,291 854,768	7.07 7.77 8.00 7.63 6.320 6.34 7.441 7.440 7.441 7.440 5.11 7.440 5.11 7.92 8.39 8.950 67.33 8.221 8.32 8.32 8.32 8.32 8.32 8.32 8.32 8.32
		11,483,164	10,984,574	

DETAILS OF INVESTED FUNDS (continued)

	Interest <u>rate</u>	Par value	Cost	Net yield
REAL ESTATE MORTGAGES AND SBA LOANS (continued): Small business loans serviced by - Alaska Mutual Savings Bank, Anchorage Alaska State Bank, Anchorage First National Bank of Ketchikan First National Bank of Ketchikan National Bank of Alaska, Anchorage Peoples Bank & Trust Company, Anchorage Peoples Bank & Trust Company, Anchorage	9.50 11.00 10.50 10.25 9.00 8.00 10.50 9.75 11.50 10.50 10.00 9.75 9.50 8.75 8.00 9.25 9.00 8.00		\$ 270,019 6,629 136,546 47,703 18,414 129,550 342,544 307,434 1,259,629 179,135 186,832 294,746 152,939 1,548,605 301,987 49,080 460,887	8.25 7.50 8.75 8.50
2007			5,893,997	

DETAILS OF INVESTED FUNDS (continued)

·	Interest rate	Par value	Cost	Net yield
REAL ESTATE MORTCAGES AND SBA LOANS (continued):				
Alaska Bank of Commerce Alaska Federal Savings and Loan, Juneau Alaska Federal Savings Bank, Anchorage Alaska Mutual Savings Bank, Anchorage Alaska National Bank, Fairbanks	9.50 9.50 10.50 9.25 10.00 10.375 10.00 9.75 9.625 9.375 10.50 10.25 10.25 10.00 9.75 9.375 10.50 10.75 10.50 10.75 10.50 10.75 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50	\$	116, 253 580, 236 1,428, 146 560, 262 96, 230 103, 226 74, 791 221, 793 451, 905 469, 943 822, 561 168, 640 99, 788 491, 216 338, 410 431, 865 150, 825 175, 508 461, 079 78, 096 121, 654, 238 912, 441 80, 732 157, 391 157, 391 15, 367, 623	10.50 10.19 10.07 10.06 9.94 10.06 9.69 9.44 9.19 10.31 10.44 10.19 10.31 9.69 9.81 9.44 9.19 9.06 8.94 12.00 11.19 11.31

DETAILS OF INVESTED FUNDS (continued)

	Interest <u>rate</u>	Par value	Cost	Net yield
REAL ESTATE MORTGAGES AND SBA LOANS (continued):				
Conventional/residential mortgages serviced by (continued) -		·	S15,367,623	
Balance brought forward			33.5, 307, 025	
Alaska National Bank, Fairbanks Alaska Pacific Bank Alaska State Bank, Anchorage Anchorage Anchorage Anchorage Anchorage	10.50 10.00 9.75 9.50 10.50 11.00 10.50 12.00 10.00 10.00 9.75 9.60 9.375 11.00 10.50 10.50 10.50 10.50 10.50 10.75 11.00 10.75 10.75 10.75 10.50 10.75 10.50 10.75		2,259,590 139,132 380,546 80,034 97,053 197,706 525,000 481,840 1,000,000 261,739 266,730 76,576 385,518 1,255,073 75,809 339,375 112,337 5912,337 5912,337 112,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5912,337 5913,394	9.29 9.19 9.06 10.81 10.31 10.06 9.56 9.19 9.06 10.69 10.44 10.56 10.19 10.31 10.06 9.81 9.81 9.44
Balance carried forward			۷, ۶۲۷, ۵۶۹	-

DETAILS OF INVESTED FUNDS (continued)

	Interest rate	Par value	Cost	Net yield
REAL ESTATE MORIGAGES AND SBA LOANS (continued):				
Conventional/residential mortgages serviced by (continued) -				
Balance brought forward			\$27,513,894	
Alaska State Bank, Anchorage Alaska State Bank, Sanchorage Amfac Mortgage Company Amfac Mortgage Company Arctic First Federal Savings and Loan, Fairbanks	9.625 9.50 9.50 9.375 9.375 10.50 10.50 10.25 11.00		179,150 1,932,638 100,000 1,749,254 108,000 90,000 442,140 143,691 512,207 83,350 775,033	9.31 9.19 9.31 9.06 9.06 10.19 10.31 10.06 10.75 10.44
Arctic First Federal Savings and Loan, Fairbanks First National Bank of Anchorage	10.75 10.75 10.50 10.50 10.25 10.02 10.00 10.00 9.75 9.75 9.625 9.375 9.375 9.00 12.00 12.00 11.00 10.75		906,715 408,396 477,468 215,715 208,802 490,250 849,748 581,646 1,341,548 430,269 2,629,885 812,443 50,086 90,682 156,737 827,934 485,439	10.50 10.56 10.19 10.31 9.94 10.06 9.81 9.44 9.56 9.31 9.06 9.06 11.69 11.75 10.81 10.56
Balance carried forward			44,733,566	

DETAILS OF INVESTED FUNDS (continued)

	Interest rate	Per value	Cost	Net yield
REAL ESTATE MORTGAGES AND SBA LOANS (continued):				
Conventional/residential mortgages serviced by (continued) -			\$44,733,566	
First National Bank of Anchorage First National Bank of Ketchikan First National Bank of Anchorage Home Federal Savings and Loan, Anchorage	10.50 10.50 10.25 10.25 9.75 9.50 9.375 11.00 10.50 10.25 10.00 9.75 9.375 10.75 10.50 10.25 10.00 10.25 10.00 10.25 10.00 10.25		38,667 599,212 195,274 96,875 57,566 78,766 87,244 363,025 127,667 41,847 286,684 329,203 749,713 110,728 152,323 81,556 433,411 459,968 119,477 783,225 425,973 281,142 548,290 984,743 367,082 89,880 108,980 129,194 139,993 547,500 53,686,139	10.4 ² 10.1 ³ 10.3 9.9 10.0 9.6 9.8 9.4 9.3 9.1 ³ 10.8 10.4 10.4 10.4
				•

DETAILS OF INVESTED FUNDS (continued)

٠		Interest rate	Par value	. <u>Cost</u>	Net yield
	REAL ESTATE MORTGAGES AND SBA LOANS (continued):				
	Conventional/residential mortgages serviced by (continued) -				
	Balance brought forward			\$53,686,159	
	Peoples Mortgage Company Peoples Mortgage Company Security National Bank, Anchorage	10.50 10.25 11.50 11.00 10.50 10.25 10.00 10.00 9.75 9.375 9.375 9.375 11.00 10.50		216,750 675,000 127,377 497,821 274,013 74,537 305,510 131,763 419,180 483,499 145,511 428,879 147,804 237,308	10.31 10.19 11.25 10.81 10.31 9.94 9.69 9.81 9.44 9.19 9.06 8.94 10.81 10.31
			•	57,851,111	·
				<u>\$74,729,682</u>	

PUBLIC EMPLOYEES' RETIREMENT FUND Investment Summary June 30, 1977

	Cost <u>Value</u>	Market Value
Cash:		
Savings Deposits	\$ 3,331,940	\$ 3,331,940
Short Term Debt Issues: Banker Acceptances Savings Certificates Total Short Term Debt Issues	1,488,428 764,000 \$ 2,252,428	1,497,598 765,336 \$ 2,262,934
Fixed Income Marketable Issues: U.S. Agency Securities U.S. Treasury Notes and Bonds Corporate Notes and Bonds Private Placements Total Fixed Income Marketable Issues	\$ 54,879,908 4,999,224 22,449,042 1,700,000 \$ 84,028,174	\$ 55,976,248 5,188,125 23,214,462 1,700,000 \$ 86,078,835
Loans and Morgages: FHA Small Business Conventional Total Loans and Mortgages	\$ 10,984,574 5,893,997 57,851,111 \$ 74,729,682	\$ 10,593,440 5,781,188 59,576,981 \$ 75,951,609
Common Stock Account: Cash Short Term Debt Issues Fixed Income Issues Common Stock Total Common Stock Account	\$ 182,187 5,169,028 3,976,624 16,750,590 \$ 26,078,429	\$ 182,187 5,169,028 4,014,300 17,455,313 \$ 26,820,828
Total Investments	\$190,420,653	\$194,446,146

	Fiscal Year Ended		
	June 30, 1977	June 30, 1976	
Beginning Equities and Reserves	\$141,988,644	\$107,556,336	
Additions:			
Employees' Contributions Including Interest:			
Alaska Central Railbelt	\$ 21,193	\$	
Alaska Housing Finance Corporation	9,257	3,229	
Alaska Municipal League	3,295	3,598	
Alaska, State of	8,973,734	8,273,193	
Alaska, University of	929,363	676,512	
Alaska, University of, Geophysical Institute	98,028	73,006	
is Alaska Unorganized Borough Schools	(281,644)	551,113	
and WAleutian Region School District	16,626	331,113	
িন্তু Anchorage Borough Schools	845,590	844,370	
Anchorage, City of	853,977	779,899	
Anchorage, Greater Area Borough	1,079,098	819,441	
Annette Island School	24,793	013,441	
Bering Straits School	34,298		
Bethel, City of	1,547	2,699	
Bristol Bay Borough	10,085	4,093	
Bristol Bay Regional Resource Center	190	4,033	
Market Control District	10,354		
Chugach Regional School	1,441	•	
Copper River School	31,872		
Cordova, City of	23,226	36,891	
Cordova Community Hospital	30,023	30,021	
Delta Juncion, City of	3,587	1,749	
Thairbanks, City of	385,588	355,635	
Fairbanks Public Utilities	147,430	115,818	
Galena City Schools	2,478	2,218	
Gateway Borough	28,717	25,884	
Haines, City of	9,806	11,913	
# Hoonah City Schools		8,479	
101tarod Area School	9,678 7 527	0,473	
Juneau, City and Borough of	7,537	265,899	
Schools Schools	283,303 72,780	=	
Kenai, City of	_	64,666 32,692	
King Cove, City of	48,396	1,488	
king Cove City Schools	1,022	2,052	
Kootak, City of	2,323		
Kodlak Island Borough School	61,672 33,906	62,618	
Sacrazebue, City of	33,806 7,601	8,930	
KUSPuk School District		0,500	
**************************************	13,622		
SUSKOKWIM School District	17,588		
lower Yukon School District	86,821		
	25,389		

	Fiscal Year Ended		
	June 30, 1977	June 30, 1976	
Additions - Continued: Employees' Contributions - Continued:			
Matanuska Susitna Borough Matanuska Susitna Borough Schools Nome City Schools Nome Municipal Utilities North Slope Borough	\$ 47,102 64,236 21,430 63,521 63,174	\$ 39,335 38,440 17,216 45,699 33,704	
North Slope Borough School District North Star Borough North Star Borough Schools Northwest Arctic Schools Northwest Regional Resource Center	90,051 129,589 246,836 103,728 389	87,551 279,152	
Petersburg, Čity of Pribilof Region Schools Selawik School District Sitka, City and Borough of	48,837 6,798 7,173 81,569	37,334 15,550 75,327	
Sitka Community Hospital Sitka Borough School District Skagway, City of Soldotna, City of	26,738 26,313 10,895 8,130	23,798 7,577 2,001	
Southcentral Regional Resource Center Southeast Island Schools Southeast Regional Resource Center Southwest Regional School District	884 4,801 915 48,803	.,	
Valdez, City of Valdez City Schools Wrangell, City of Wrangell School District	53,204 12,909 28,052 3,560	42,852 11,849 24,291 3,126	
Yukon Flats School Yukon-Koyukuk School Less Interest Credited to Employees	35,918 37,782 (1,842,395)	(1,464,813)	
Total Employees' Contributions	\$13,396,432	\$ 12,348,074	
Employers' Contributions:			
Alaska Central Railbelt Alaska Housing Finance Corporation Alaska Municipal League Alaska, State of Alaska, University of Alaska, University of, Geophysical Institute Alaska Unorganized Borough Schools	23,018 19,699 10,946 20,936,847 1,816,362 159,895 36,637	6,157 5,662 12,372,734 1,375,700 120,029 495,828	

·		Fiscal Year Ended	
		e 30, 977	June 30, 1976
Additions - Continued: Employers' Contributions - Continued:			
Aleutian Region School District		14,340	
Anchorage Borough Schools	\$1	731,662	\$1,281,694
Anchorage, City of		551,167	2,471,642
Anchorage, Greater Area Borough		300,408	1,385,292
Annette Island School	٠,	18,808	190000020
Bering Straits School		33,954	
Bethel, City of		6,337	3,820
Bristol Bay Borough		8,850	7,204
Bristol Bay Regional Resource Center		391	7,5201
Chatham School District		4,985	
Chugach Regional School		2,780	ř
Copper River School	•	34,864	
Cordova, City of		71,178	65,410
Cordova Community Hospital		24,556	00,110
Delta Junction, City of		9,063	1,979
Fairbanks, City of		845,511	685,083
Fairbanks Public Utilities		293,876	234,884
Galena City Schools		4,397	3,272
Gateway Borough		48,652	39,704
Haines, City of		18,012	16,810
Hoonah City Schools		24,461	14,649
Iditarod Area School		12,990	·
Juneau, City and Borough of	(617,950	488,931
Juneau Borough Schools	•	169,723	87,962
Kenai, City of		85,661	72,300
King Cove, City of		2,294	3,352
King Cove City Schools		4,981	1,675
Kodiak, City of		141,093	115,584
Kodiak Island Borough School		126,781	
Kotzebue, City of		22,184	15,530
Kuspuk School District		22,039	
Lake & Peninsula School		15,528	
Lower Kuskokwim School District	•	100,890	
Lower Yukon School District		39,955	
Matanuska Susitna Borough		96,873	67,690
Matanuska Susitna Borough Schools Nome City Schools	•	134,555	63,058
Nome Municipal Utilities		59,686	43,693
North Slope Borough		125,910	87,870
North Slope Borough School District		114,337	54,510
North Star Borough		175,431	150 405
North Star Borough Schools		250,371	159,485
Northwest Arctic Schools		527,715	418,557
Northwest Regional Resource Center		137,405 796	
Petersburg, City of	7	790 103,073	04 750
Pribilof Region Schools	l	10,526	84,758
		10,020	

	Fiscal Year Ended	
	June 30,	June 30
	1977	<u> 1976</u>
Additions - Continued: Employers' Contributions - Continued:		
Selawik School District	\$ 116,152	\$ 20,29
Sitka, City and Borough of	182,051	142,49
Sitka Community Hospital	47,886	116913
Sitka Borough School District	67,376	47,82
Skagway, City of Soldotna, City of	18,195	11,296
Southcentral Regional Resource Center	12,233	4,15
Southeast Island Schools	2,071	
Southeast Regional Resource Center	8,114	
Southwest Regional School District	1,829 41,328	
Vaidez, City of	88,835	56,661
Valdez City Schools	27,192	21,885
Wrangell, City of	55,263	44,648
Wrangell School District	13,012	10,791
Yukon Flats School Yukon-Koyukuk School	15,218	
Total Employers' Contributions	33,024	
Toda Comproyers Contributions	\$ 34,881,182	\$ 22,712,558
Interest Earned on Reinstatements	\$ 42,106	d 03 808
Net Investment Income 1)	12,602,465	\$ 21,464 8,367,857
Tatal Alicas.		0,307,037
Total Additions	\$ 60,922,185	\$ 43,449,953
Total Equities, Reserves and Additions	\$202,910,829	\$151,006,289
Deductions:		
Administrative Expenses:		
Personal Services	\$ 253,031	\$ 192,220
Travel	11,864	9,009
Contractual Services Commodities	96,523	83,092
Equipment	. 2,368	2,015
Inter-Agency Services	1,661	2,448
Total Administrative Expenses	166,900	127,600
	\$ 532,347	\$ 416,384
Employees' Contributions and		
Interest Refunded	\$ 3,816,748	\$ 3,758,719
Retirement Benefits Paid	\$ 7,607,162	\$ 4,842,542
Total Deductions		
	\$ 11,956,257	\$ 9,017,645
Ending Equities and Reserves	\$190,954,572	\$141,988,644

PUBLIC EMPLOYEES' RETIREMENT FUND Footnotes to Comparative Statement of Operations

1) Schedule of Net Investment Income for Fiscal Year ended June 30, 1977.

Interest Income
Gain/(loss) on Sale of Securitites

\$11,945,883 ___656,582

Total Net Investment Income

\$12,602,465

PUBLIC EMPLOYEES' RETIREMENT FUND Analysis of Cash

General Ledger Cash on 6/30/77 Adjusted as of 8/31/77	\$ 632,104.99
Less Auditors' Adjustments	98,186.00
Sub-Total	\$ 533,918.99
Add Cash in Trustee Common Stock Account	44,558.00
Annual Report Cash Balance	\$ 578,476.99

MERCER

Benefit Services / Consulting Actuaries

October 11, 1977

Mr. B. B. Allen Commissioner of Administration State of Alaska Department of Administration Pouch CR Juneau, Alaska 99811

Actuarial Status Alaska Public Employees' Retirement System

Dear Commissioner Allen:

This is a brief statement to outline the actuarial status of the Alaska Public Employees' Retirement System. The actuarial valuation which we perform each year has the following objectives:

- (1) To examine the status of funding of the System.
- (2) To develop contribution rates for each participating employer in the System which are adequate to support the benefits of the System.

The actuarial valuation of the Alaska Public Employees' Retirement System as of December 31, 1976 is based upon actuarial assumptions and methods which are identical to those used in the prior valuation. The more significant results are as follows:

Contribution Rates

Contribution rates as a percent of earnings have increased slightly, primarily due to greater than anticipated salary increases. The following table summarizes these rates.

		Valuation 12-31-75	Date 12-31-76
(1)	Consolidated Rate	9.43%	9.90%
(2)	Average Past Service Rat	e <u>1.97%</u>	1.89%
(3)	Average Total Contribu- tion Rate	11.40%	11.79%

Mr. B. B. Allen Page Two October 11, 1977

Funding Progress

One of the best measures of a pension plan's funding progress is the growth of assets relative to the present value of accrued benefits. The greater-than-assumed investment yield of the fund during 1976 more than offset the effect of rapid growth in salaries during the year, thus leading to an increase in the accrued benefit funding ratio.

	. '	Valuat	ion Date
		<u>12-31-75</u>	12-31-76
(1)	Valuation Assets	\$119,860,568	\$159,121,540
(2)	Present Value of Accrued Benefits	196,992,761	246,981,544
(3)	Accrued Benefit Funding Ratio	60.8%	64.4%

A more complete analysis appears in the actuarial valuation report. In summary, it is our opinion that the funding progress of the System is satisfactory and the contribution levels are sufficient to support the benefits of the System.

Sincerely,

Robert F. Richardson, MAAA Assistant Vice President

RFR: jn

ACTUARIAL BASIS

Valuation of Liabilities

A. Actuarial Method - Attained Age Normal, also known as Aggregate Method with Supplemental Liability. The unfunded accrued benefit liability is amortized over 35 years.

B. Actuarial Assumptions -

(1) Interest 5% per annum, compounded annually, net of investment expenses.

(2) Salary Scale 5% per annum, compounded annually.

(3) Mortality 1951 Group Annuity Mortality Table with Projection "C" to 1965.

(4) Turnover

Based upon actual total turnover experience. (See Table 1.)

(5) Disability

Incidence rates in accordance with Table 2. Post-disability mortality in accordance with the 1944 Railroad Retirement experience rates. 80% of the disabilities are assumed to be occupational for police and fire; 20% for others.

(6) Retirement Age

Later of age 55 and 20 years for police and fire; age 55 and 30 years of service for others.

(7) Contribution Refunds
90% of terminating employees will take their contributions; 10% will leave their contributions and receive their deferred vested benefit.

(8) Expenses No loading for expenses.

Valuation of Assets - Book Value

TABLE 1 STATE OF ALASKA

VALUATION TURNOVER RATES

Age	<u>Male</u>	Female
Age 2012234567890123345678901234456789012345678901233456789012334567890123456789000000000000000000000000000000000000	Male .3274 .2782 .2408 .2334 .2151 .1917 .1690 .1528 .1510 .1465 .1408 .1351 .1309 .1303 .1289 .1269 .1269 .1248 .1229 .1223 .1207 .1185 .1161 .1140 .1132 .1112 .1081 .1060 .1041 .1038 .1025 .1021 .1012 .1006 .1041 .1038 .1025 .1021 .1006 .1041 .1038 .1025 .1021 .1012 .1006 .1041 .1038 .1025 .1021 .1012 .1006 .1041 .1038 .1025 .1021 .1012 .1006 .1041 .1038 .1025 .1021 .1012 .1006 .1041 .1038 .1025 .1021 .1012 .1006 .1004 .0996 .0997 .0999 .1009 .1011	Female .3753 .3490 .3290 .3254 .3162 .3041 .2916 .2814 .2792 .2734 .2652 .2560 .2471 .2435 .2342 .2218 .2087 .1973 .1937 .1845 .1725 .1603 .1505 .1480 .1416 .1335 .1257 .1200 .1192 .1173 .1150 .1128 .1115 .1112 .1108 .1115 .1116
59 60	.1022 .1047	.1208 .1277

TABLE 2
PUBLIC EMPLOYEES' RETIREMENT SYSTEM
OF ALASKA

Disability Rates

All Employees

Annual Rates Per 1,000 Employees

	- /		
Age	Rate	<u>Age</u>	Rate
20 21 22 23 24	.70 .71 .72 .73 .74	45 46 47 48 49	1.62 1.76 1.91 2.07 2.23
25 26 27 28 29	.75 .76 .78 .80 .82	50 51 52 53 54	2.40 2.60 2.86 3.18 3.55
30 31 32 33 34	.84 .86 .88 .90	55 56 57 58 59	4.00 4.59 5.34 6.10 7.20
35 36 37 38 39	.96 .99 1.03 1.07 1.11	60 61 62 63 64	8.43 9.75 11.30 13.05 14.90
40 41 42 43 44	1.15 1.20 1.27 1.36 1.48		

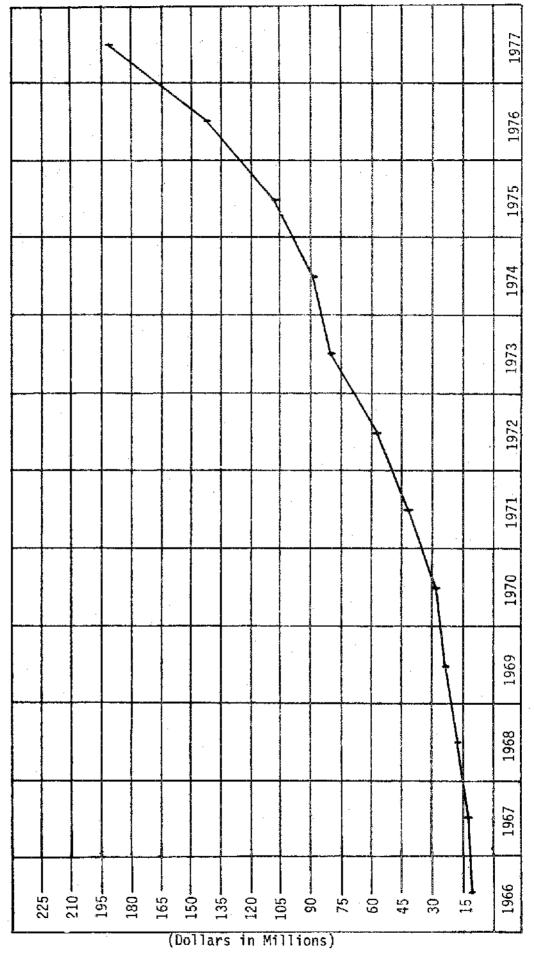
STATE OF ALASKA

PUBLIC EMPLOYEES' RETIREMENT FUND Historical Data Fiscal Years 1965 through 1977 (cents omitted)

12,602,465	3,816,748	7,607,162	13,438,538	34,881,182	190,954,572	1977
8,367,857	3,758,719	4,842,542	12,348,074	22,712,558	141,988,644	1976
.2,365,398	3,163,052	2,810,321	8,449,474	13,435,344	107,556,336	1975
2,270,806	2,334,265	1,714,642	6,805,053	9,439,931	89,606,549	.1974
3,345,726	1,643,831	1,120,276	6,636,276	15,269,037	80,116,285	1973
3,252,779	1,144,434	565,551	4,677,640	9,957,962	57,285,001	1972
1,756,740	882,218	315,390	3,568,932	7,408,647	41,444,559	1971
1,687,211	561,178	200,236	2,728,332	2,763,176	29,293,897	1970
1,035,935	410,490	139,360	1,917,650	3,854,514	22,497,780	1969
675,866	704,463	72,767	597,580	2,459,200	16,179,278	1968
560,279	359,975	54,620	567,799	1,580,520	13,127,498	29 61.
390,773	277,582	45,142	700,891	1,650,980	10,799,627	1966
\$ 263,758	\$ 233,321	\$ 42,714	\$ 668,626	\$ 1,418,567	\$ 8,127,439	1965
Net Investment Income During Fiscal Year	Contributions and Interest Refunded During Fiscal Year	Benefits Paid Including Death Benefits	Employees' Contributions During Fiscal Year	Employers' Contributions During Fiscal Year	Assets Fiscal Year End	Fiscal Year
Net	Employees Contributions	Benefits				
	/332C CE1					

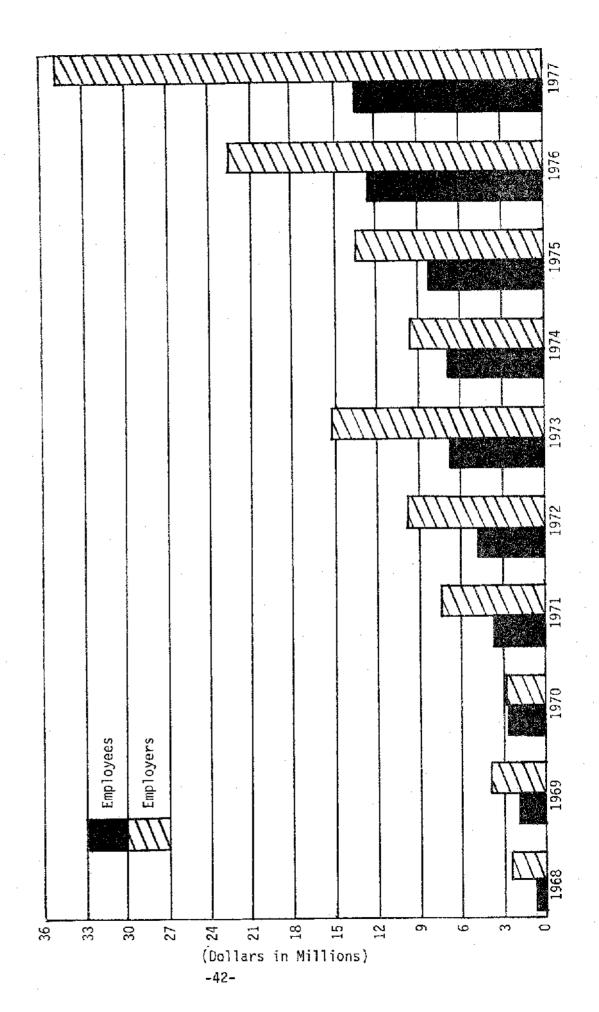
STATE OF ALASKA

PUBLIC EMPLOYEES' RETIREMENT FUND Total Assets Fiscal Years 1966 through 1977



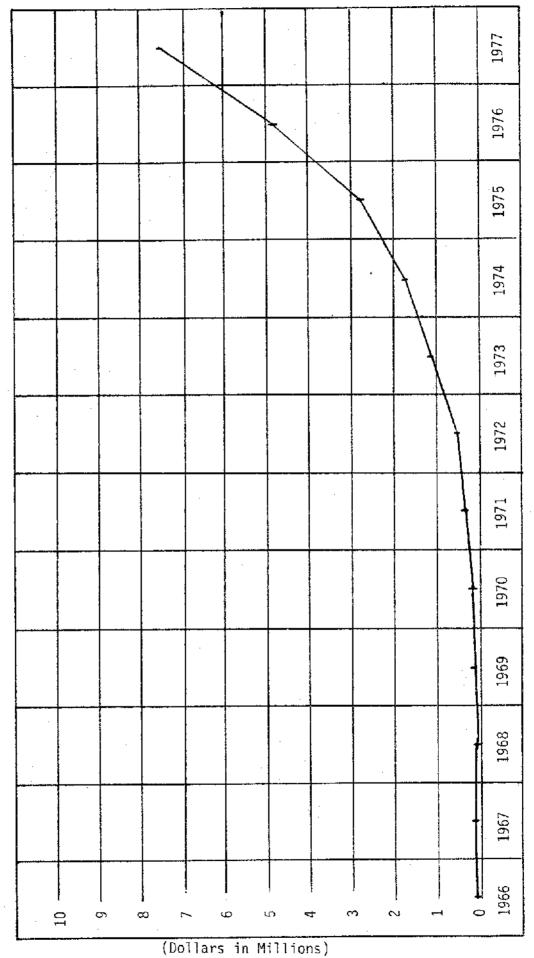
STATE OF ALASKA

PUBLIC EMPLOYEES' RETIREMENT FUND Employees' and Employers' Contributions Fiscal Years 1968 through 1977



STATE OF ALASKA

PUBLIC EMPLOYEES' RETIREMENT FUND Benefits Paid Fiscal Years 1966 through 1977



PUBLIC EMPLOYEES' RETIREMENT FUND Employer Contribution Rates Fiscal Year 1977

Employer	<u>Percentage</u>
Alaska Central Railbelt School District	10.37
Alaska Housing Finance Corporation	10.37
Alaska Municipal Leagues	17.41
Alaska, State of	11.18
Alaska, University of	9.38
Alaska, University of, Geophysical Institute	3.JO
Aleutian Region School District	9.38 10.37
Anchorage Borough School District	10.37
Anchorage, City of	11.18
Anchorage, Greater Borough	•
Annette Island School District	11.18
Bering Straits School District	10.37
Bethel, City of	10.37
Bristol Bay Borough	9.54
Bristol Bay Regional Resource Center	9.00
Chatham School District	8.88
Chugach Regional School District	10.37
	10.37
Copper River School District	10.37
Cordova, City of	9.92
Cordova Community Hospital	9.92
Delta Junction, City of	8,88
Fairbanks (Includes City and Utilities)	12.19
Galena, City Schools	8.88
Haines, City of	8.80
Hoonah, City Schools	11.79
Iditarod Area School District	10.37
Juneau (Borough and City)	9.90
Juneau Borough School District	9.90
Kenai, City of	8.98
Ketchikan, Gateway Borough	8.77
King Cove, City of	8.88
King Cove City School District	8.88
Kodiak, City of	11.09
Kodiak Island School District	10.53
Kotzebue, City of	8.99
Kuspuk School District	10.37
Lake and Peninsula School District	10.37
Lower Kuskokwim School District	10.37
Lower Yukon School District	10.37
Matanuska-Susitna Borough (Includes School District)	11.59
Nome, City of	9.86
Nome City Schools	12.75
North Slope Borough	9.13
North Slope Borough School District	9.30
North Star Borough (Includes School District)	9.74
Northwest Arctic School District	10.37
Northwest Regional Resource Center	8.88

Employer Contribution Rates (cont.) Fiscal Year 1977

<u>Employer</u>	Percentage
Petersburg, City of Pribilof Region School District Selawik City School District Sitka, City and Borough (Includes School District) Sitka Community Hospital Skagway, City of Soldotna, City of Southcentral Regional Resource Center Southeast Islands School District Southeast Regional Resource Center Southwest Regional Resource Center Valdez, City of Valdez, City Schools Wrangell, City Schools Yukon Flats School District	11.17 10.37 8.98 11.57 11.57 9.69 9.47 10.37 10.37 10.37 10.37 10.41 10.61 9.32 10.14 16.92 10.37
Yukon Koyukuk School District	10.37

TEACHERS'
RETIREMENT
FUND

BOARD MEMBERS

Name

Jerome W. Norum, Chairman

Paul W. Bowen

Jean A. Johnson

Merritt C. Olson

Leah J. Peterson

Term Expires

January 31, 1979

January 31, 1978

July 31, 1978

January 31, 1980

July 1, 1978

September 16, 1977

Board of Directors State of Alaska Teachers Retirement System Juneau, Alaska

We have examined the statements of assets and equity arising from cash transactions of the State of Alaska Teachers Retirement System as of June 30, 1977 and 1976, and the related statements of changes in equity arising from eash transactions for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Cash and investment accounts at June 30, 1977 and 1976 were confirmed by direct communication with the depositaries, custodians and servicing financial institutions.

As described in Note A, the System's policy is to prepare its financial statements on the basis of cash receipts and disbursements. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly the assets and equity arising from cash transactions of the State of Alaska Teachers Retirement System as of June 30, 1977 and 1976, and the changes in equity arising from cash transactions for the years then ended, on the basis of accounting described in Note A, which basis has been consistently applied.

Certified Public Accountants

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STATEMENTS OF ASSETS AND EQUITY ARISING FROM CASH TRANSACTIONS

	June	30,
	1977	<u>1976</u>
ASSETS		· ;
Cash	\$ 3,880,978	\$ 1,759,647
Certificates of deposit and savings account Bonds, notes and debentures:	5,543,992	3,043,159
United States Government, at cost (market \$64,519,972 in 1977, \$43,819,952 in 1976)	63,327,153	43,707,899
Other, at cost (market \$23,966,688 in 1977, \$35,977,801 in 1976)	23,323,963	35,993,587
Common stocks, at cost (market \$23,308,125 in 1977, \$22,468,978 in 1976) Real estate mortgages and SBA loans	19,327,713 61,941,668	18,155,722 34,963,368
	\$177,345,467	\$137,623,382
EQUITY		
Equity	\$177,345,467	\$137,623,382

STATEMENTS OF CHANGES IN EQUITY ARISING FROM CASH TRANSACTIONS

	<u>Year ende</u>	d June 30,
	<u>1977</u>	<u>1976</u>
Balance at beginning of year	\$137,623,382	\$105,797,313
Additions during the year: Employee contributions Employer and state contributions Investment income Interest on members' indebtedness	12,162,883 24,030,230 13,583,578 460,346	11,590,177 19,348,436 9,240,962 369,534
	50,237,037	40,549,109
Deductions during the year: Retirement benefits paid Refunds to terminated members Administrative expenses	8,161,421 1,859,829 493,702	6,390,012 1,926,610 406,418
	10,514,952	8,723,040
Balance at end of year	<u>\$177,345,467</u>	<u>\$137,623,382</u>

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS YEARS ENDED JUNE 30, 1977 AND 1976

NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The State of Alaska Teachers Retirement System, established June 30, 1955, is a contributory pension system covering substantially all teachers and employees of the Department of Education and participating school districts.

Investments are stated at cost. Investment income consists of interest, dividends and the gain or loss on disposition of investments, which is the difference between the acquisition cost and the net sales proceeds.

The System maintains its records, and the financial statements are prepared, on the cash basis of accounting.

Contributions, interest and dividends, retirement benefits, refunds to terminating members and administrative expenses are recorded when cash is received or disbursed. Deferred discount or premium on mortgages is amortized over the terms of the mortgages.

NOTE B - DESCRIPTION OF THE SYSTEM:

Eligible participants contribute 7% of gross pay to the System. The participants' employers and the State of Alaska jointly contribute an amount which, in addition to participants' contributions, will annually fund estimated current service costs and fund prior service costs over 40 years.

Participants are entitled to full retirement benefits upon completion of 20 years of Alaska service or at age 55. Vesting occurs over eight years. All retirees receive a minimum monthly benefit of \$20 for each year of credited service. Upon termination member contributions, plus accrued interest, are refundable.

NOTE C - ACTUARIAL METHOD:

The employer contribution rates are determined actuarially on the basis of the aggregate method with supplemental liability.

Significant actuarial assumptions affecting employer funding rates are: 5% investment yield and salary escalation of 4% per year. Assets are valued using a moving three-year average relationship between cost and market values.

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The increase in actuarially determined unfunded prior service liability, from \$81,200,000 in 1976 to \$109,900,000 in 1977, results from legislation which reduced retirement ages and retroactively increased benefits.

ADDITIONAL INFORMATION

The additional information presented in the following pages has been taken from the accounting and other records of the System and has been subjected to the tests and other auditing procedures applied in the examination of the financial statements for the year ended June 30, 1977. In our opinion, such information is fairly presented in all material respects in relation to the financial statements taken as a whole, although it is not necessary for a fair presentation of the System's assets and equity or changes in equity arising from cash transactions.

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Certified Public Accountants

DETAILS OF INVESTED FUNDS

CERTIFICATES OF DEPOSIT AND SAVINGS ACCOUNT:	Maturity <u>date</u>	Cost	Interest rate
Lertificates of deposit Alaska Federal Savings and Loan Alaska Federal Savings and Loan Alaska Federal Savings and Loan Aloan Actic First Federal Savings and Loan Arctic First Federal Savings and Loan Arctic First Federal Savings and Loan Loan Lipsa Federal Savings and Loan	7/01/77 10/12/77 10/12/78 10/10/78 10/10/78 7/15/79 7/15/80 6/30/77 6/30/78	200,000 175,000 100,000 150,000 200,000 100,000 137,000	6.75 7.75 7.75 7.50 7.50 7.50 7.50
<u>Savines accounts</u> - Bask of California Alaska National Bank		2,741,148 2,741,148 2,540,844 281,992	5.00 5.00

DETAILS OF INVESTED FUNDS (continued)

UNITED STATES GOVERNMENT:	Interes	t Maturity date	Par value	Cost	Market	Net vie
U. S. Treasury Notes - U. S. Treasury Notes	7.000 8.250 6.625 6.250 8.000 7.875 6.625	11/15/81 05/15/05 11/30/77 11/15/79 02/15/83 05/15/86	\$ 2,500,000 1,000,000 3,000,000 800,000 100,000 250,000	\$ 2,506,250 997,500 3,004,062 799,503 100,000 250,000	\$ 2,532,031 1,066,250 3,013,140 806,504 105,563 261,047	26.098 .272. .610. .000.
U. S. agencies - Twelve Federal land hanks Federal Home Loan Mortgage Corporation	8.800 8.125	10/21/85 03/15/07	8,750,000 2,500,000	8,634,815 8,827,734 2,489,844	8,782,595 9,526,563 2,512,500	
Other U. S. agencies - International Bank for Reconstruction & Development	÷		11,250,000	11,317,578	12,039,063	
GNMA mortgage-backed securities -	7.650	05/01/87	450,000	447,750	447,188	7.650
非非非非非常	7.000 7.250 7.250 7.250 7.250	07/15/12 11/15/04 02/15/05 03/15/05 07/15/05	511,455 399,570 894,699 919,738 908,291	511,455 368,112 831,691 839,183	476,932 380,590 852,201 876,051 865,147	7.000 7.869 7.799 7.843
	7.250 7.250 7.500 7.500	717.5	2,012,931 2,012,931 5,17,281	2887	392,845 470,624 1,917,317 500,308	7.799 7.854 7.843 7.863
Pool #15527 Pool #17395 Pool #15814 Pool #3245 Pool #3273 Pool #5619	7.500 7.500 7.500 7.500 8.000	1551 1551 1575 1575 1575 1575 1575 1575	1,497,903 981,411 1,000,000 1,000,000	50000	482,008 1,448,753 949,209 967,188 967,188	7.853 7.853 7.853 7.895

Balance carried forward	000.0	06/15/05	2,000,1 1,003,164	379,44 986,24	1 386,310 3 1,004,105	8.026 8.137 8.137
Pouche Ross & Ca.			13,469,396	6 12,747,121	12,968,89	?
		:				
STATE OF ALASKA TEACHERS RETIREMENT SYSTEM	·					
DETAILS OF INVESTED FUNDS (continued)						
JUNE 30, 1977						
	Interest	Maturity			Mar Tro	
UNITED STATES GOVERNMENT (continued):	rate	date	Par value	Cost	. !	Net yield
GNMA mortgage-backed securities (continued) -						
Balance brought forward			697	7.7.7	0	
Pool #7007	000	7 (1) i	1.6.7.6.2.1	\$17,968,891	
Fool #/082 Fool #10881 Pool #10104	88 000.8	04/13/05 08/15/05 06/15/06	952,356 964,838 987,838	945,957 961,672	953,249 965,742	99
FOOL #11290 POOL #11295 POOL #11568	000	27.5	932,	4000	8 8 6 7 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8	्र ल
Fool #11537	000	3/15/	, 60 , 60 , 60 , 60 , 60	~	Ç.,4,	20
1001 #1240 Fool #12983 Fool #1986	000	5.5		0.20		20
Fool #12985	000	100	_	06.00 20.00	10,	00
FOOL #14900 Pool #14900 Pool #1950	000	12.	, , , , , , , , , , , , , , , , , , ,	م کس د	987, 022,	0
FOOT #420 POOT #42160	100 500	15/	4 CO 10	36,0 0,0 0,0	498,	L~ RJ
Fool #5328	200	715/	رآست.	გ. დ. დ.	40, 97,	
Pool #7577	200	15.		72,7	7.9	000
Pool #6333 Pool #7057	500 500 500	/15/ /15/		988,522 948,425	1,006,240	144
Pool #7812 Pool #7580	500	/15/		033 1	036	m :
Poc1 #8567 Poc1 #9110	500 500	/15/	922,	946	0.00	₹₹
Pool #7786 Pool #7860	500 500	/15/K /15/K	, u (452, 1 452, 3 686, 3	# N	70
Pool #8213	200 200 200	/15/6	. ~ ~		ς S S	V
F001 #817	500 500	/15/0		2, 12, 0	_, _, _, _, _, _, _, _, _, _, _, _, _, _	000
Pool # 100 Pool # 100 Pool # 10319	000	715/0	2	0.00	- ω. - ω.	00 07 (
01 #10739	000	/15/0 /15/0	512,227	2,272 516,709 1,034,601	2,540 527,274 1,033,973	8.395 8.426 8.53
Balance carried forward			38,040,763	51,118	64,8	j

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STATE OF ALASKA TEACHERS RETIREMENT SYSTEM

DETAILS OF INVESTED FUNDS (continued)

	Net yield	•			8.288 8.066	.38				9.547	9.510	9.040	9.334 9.296	0.000	8.458 8.458	7.899 8.157	8.744 8.229	8.142	8.230 8.025	
	Market Value N			\$37,964,873	1,959,314 244,941	12,61 69,38	43,251,126	\$64,519,972		,250	,500	525,000	, 500 , 500	553,750	578,750	,488,750	,691,250 ,026,250	503,750	1,518,750	21,659,688
	Cost		,	43/,501,118	1,952,176	53,78	42,929,010	\$63,327,153		\$ 1,243,750	1,261,875 $1,020,000$	470,125	995,000	500,000	1,551,875	1,494,150	1,002,500	1,473,750	1,480,875	21,016,963
	Par value		\$32,000,000), o	1,903,402 237,952 497,985	9	43,176,165	\$63,526,165		250,	1,000,000	500))) () () ()		1,000,000	, 250°,	88	20,750,000
Material #11	date			!	08/15/06 08/15/06 02/15/06	3/15				2,0	25	70	<u> </u>	20.	26	55	08/18/16		/01/	
Interest	rate				8.500 8.500					9,500	000.0	9.750	9.250 10.000	9.250	7.875	8.125 9.750	8.250 8.00d	8.125	8.125	
	UN2TED STATES GOVERNMENT (continued);	GNMA mortgage-backed securities (continued) -	Balance brought forward		Pool #12368 Pool #16900 Pool #17046			OTHER BONDS, NOTES AND DEBENTURES;	Corporate notes and bonds - Pacific Gas & Electric Co., 1st Ref.	_	Pfizer, Inc.	Schio/BP Trans Alaska Pipeline Pfizer. Inc.	Ashland Oil Inc.	BankAmerica Corp.	Sears Roebuck and Co. Commonwealth Edison	Mountain States Telephone	New Jersey Largement New Jersey Largement Larg	Northwestern Kell Tel	ooutnern Bell Telephone	

STATE OF ALASKA TEACHERS RETIREMENT SYSTEM

DETAILS OF INVESTED FUNDS (continued)

	Interest	Maturity date	Par value	Cost	Market value	Net yield
OTHER BONDS, NOTES AND DEBENTURES (continued):						
Short-term debt issues Ceneral Motors Acceptance Corporation General Motors Acceptance Corporation Ford Motor Credit Corporation	5.250 5.250 5.250	07/05/77 07/06/77 07/07/70	\$ 277,000 450,000 557,000	\$ 277,000 450,000 557,000	\$ 277,000 450,000 557,000	5.250 5.250 5.250
			1,284,000	1,284,000	1,284,000	
Repurchase agreements - Seattle-First	5.000	07/05/77	23,000	23,000	23,000	5.000
Other - Mortgage Corporation notes	7.750	12/15/77	1,000,000	000,000,I	1,000,000	7.750
	-		\$23,057,000	\$23,323,963	523,966,688	

DETAILS OF INVESTED FUNDS (continued)

		i	•
			Market
	<u>Shares</u>	Cost	<u>value</u>
COMMON STOCKS:			
Alcan Aluminum Aluminum Co. of America American Broadcasting Co. American Home Products American Tel. & Tel. Co. Atlantic Richfield Co. Baker Intl. Corp. Big Three Industries Boeing Company Boise Cascade Corp. Caterpillar Tractor CBS, Inc. Communications Satellite Continental Oil Cooper Industries Digital Equipment Corp. Dresser Industries Exxon Corp. General Reinsurance Corp. Georgia-Pacific Corp. Georgia-Pacific Corp. Getty Oil Company Harnischfeger Corp Houston Industries, Inc. Intl. Business Machines Joy Manufacturing Koppers Company, Inc. Missouri Pacific Corp. Montana Power Company Norton Simon, Inc. Owens-Corning Fiberglass Ryder System Inc. Safeco Corporation Schering-Plough Corp. Schlumberger, Ltd. Standard Oil Co. of Calif.	15,000 10,000 25,000 9,000 15,000 10,000 2,500 30,000 7,500 14,000 12,000 4,000 4,000 17,500 2,500 17,850 5,000 17,850 5,000 17,850 5,000 16,000 26,500 16,000 26,500 16,000 27,600 20,0	\$ 352,095 372,814 932,875 356,025 696,570 445,060 541,227 328,500 130,962 541,247 332,573 713,267 329,656 555,240 501,768 120,398 171,300 710,662 403,858 416,648 752,908 112,169 112,490 1,487,786 209,770 610,019 581,538 779,186 141,738 604,620 245,760 465,875 321,793 636,998 387,250	952,50 605,00 793,12. 318,750 144,68; 840,000 433,12: 824,250 330,000 677,500 187,500 187,500 183,000 936,250 447,500 557,813 1,023,750 108,750 118,562 1,768,800 218,750 622,750 768,000 874,500 134,900 134,900 134,900 604,125 345,050 632,812 181,875 719,250 417,500
Stauffer Chemical Sundstrand Corporation	12,000 28,500	520,315 604,555	⊶ 469,500 1,161,375
Union Oil Co. of Cal. Union Pacific Corp. U. S. Steel Corp.	15,000 19,000 4,000	773,127 866,655 160,416	815,625 1,087,750
-1 -1 - mach April	7,000	\$19,327,713	\$23,308,125

DETAILS OF INVESTED FUNDS (continued)

	Taterest rate	Par value	Cost	Net yield
REAL ESTATE MORTGAGES AND SBA LOAMS:				
FHA mortgages serviced by - Alaska Mutual Savings Bank Alaska National Bank of Fairbanks Alaska State Bank of Anchorage First National Bank of Alaska, Anchorage National Bank of Company	8.50 8.00 7.50 6.75 6.75 8.50 7.50 7.50 7.50 8.50 7.50 5.75 5.25 8.00 7.50 7.50 7.50 8.50 7.50	\$ 605,523 93,803 324,148 89,487 350,140 64,080 356,196 91,995 69,842 226,933 391,874 250,660 993,322 352,035 1,297,462 234,544 20,193 161,980 29,489 46,114 106,034 2,261,606 112,144 19,330 29,379	\$ 605,523 90,998 304,764 84,108 326,715 62,798 337,602 97,091 68,969 215,813 378,629 239,130 956,768 330,033 1,203,195 238,309 47,728 105,568 2,149,193 106,568 2,149,193 108,266 28,315	8.00 7.92 7.84 7.07 6.39 5.43 8.76 7.30 7.30 7.39 8.53 9.05 8.03 5.01 5.18 4.88 5.12 7.15 7.19 7.30 6.12 5.750
Rainier Mortgage Company Rainier Mortgage Company Rainier Mortgage Company	7.50 6.00	350,710 292,395 134,835	335,208 280,787 130,277	7.55 5.94
	5.25	97,490 9,453,743	92,615 9,039,518	5.21

DETAILS OF INVESTED FUNDS (continued)

	Interest rate	Par value	Cost	Net yie
REAL ESTATE MORTCAGES AND SBA LOANS (continued): Small business loans serviced by Alaska National Bank, Fairbanks Alaska National Bank, Fairbanks Alaska National Bank, Fairbanks B. M. Behrends Bank, Juneau B. M. Behrends Bank, Juneau National Bank of Alaska, Anchorage	10.00 9.00 8.50 10.00 8.75 11.50 10.50 9.50 9.25 9.00 8.75 8.50		\$ 117,441 39,381 84,559 302,520 274,359 184,067 665,153 39,404 1,543,298 108,770 418,885 145,482 2,117,245	8.5C 7.5C 9.5C 8.25 11.0C 10.0C 9.0C 8.75 8.5C 8.25 8.25

DETAILS OF INVESTED FUNDS (continued)

	Interest rate	Par value	Cost	Net yield
REAL ESTATE MORTGAGES AND SBA LOANS (continued):				
Conventional/residential mortgages serviced by -				
Alaska State Bank, Anchorage	11.00		\$ 903,411	10.69
AMFAC Mortgage Company	10.50	100	83,350	10.35
Arctic First Federal Savings and	- -		00,550	101.)0
Loan, Fairbanks	10.75		64,963	10.44
Arctic First Federal Savings and				
Loan, Fairbanks	9.75		127,790	9.44
B. M. Behrends Bank, Juneau	10.75		16,940	10,44
B. M. Behrends Bank, Juneau	10.00	•	318,408	9.69
B. M. Behrends Bank, Juneau	9,75	•	62,037	9.44
B. M. Behrends Bank, Juneau B. M. Behrends Bank, Juneau	9.50		195,493	9.19
B. M. Behrends Bank, Juneau	11.00		477,667	10.81
Home Federal Savings & Loan, Anchorage	10.00		168,087	9.81
Mt. McKinley Mutual Savings	10.25		547,500	10,19
Bank, Fairbanks	10.75		0.0 / 10	
Mt. McKinley Mutual Savings	10.75		39,413	10.44
Bank, Fairbanks	10.00		110 /00	0.40
Mt. McKinley Mutual Savings	10.00		119,420	9.69
Bank, Fairbanks	9.75		508,345	9.44
Mt. McKinley Mutual Savings	3.75		500,345	9.44
Bank, Fairbanks	9.25		139,585	8.94
Mt. McKinley Mutual Savings			137,303	0.74
Bank, Fairbanks	10.25		281,349	10.06
National Bank of Alaska, Anchorage	10.75		290,107	10.44
National Bank of Alaska, Anchorage	10.50		124,000	10.31
National Bank of Alaska, Anchorage	10,25		427,948	9.94
National Bank of Alaska, Anchorage	10.00		811,404	9.69
National Bank of Alaska, Anchorage	10.00		740,865	9.81
National Bank of Alaska, Anchorage	9.80		59,795	9.49
National Bank of Alaska, Anchorage	9.75		1,725,823	9.44
National Bank of Alaska, Anchorage	9.75		119,358	9.56
National Bank of Alaska, Anchorage	9.625	•	1,177,893	9.31
National Bank of Alaska, Anchorage	9.50		3,094,925	9.19
National Bank of Alaska, Anchorage	9.375		2,414,978	9.06
National Bank of Alaska, Anchorage	9.375		72,996	9.31
Balance carried forward			15 110 050	
WALLE COLUMN TO THE TOTAL OF TH			15,113,850	

DETAILS OF INVESTED FUNDS (continued)

	Interest rate	Par value	Cost	Net yîe
REAL ESTATE MORTGAGES AND SBA LOANS (continued):			···	
Conventional/residential mortgages serviced by (continued) -				
Balance brought forward			\$15,113,850	
National Bank of Alaska, Anchorage Alaska Bank of Commerce, Anchorage Alaska Mutual Savings Bank, Anchorage	9.25 10.75 10.50 10.375 10.25 9.75 12.00 11.25 11.25 11.00 10.50 10.00 9.75 9.625 9.625 9.50 11.00 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.75 9.50 10.75 9.25 9.25 9.25		296,444 234,267 596,402 505,524 112,211 272,028 128,046 237,457 215,172 565,871 469,036 624,975 1,932,056 870,986 2,021,378 544,817 356,124 1,556,995 281,310 602,200 238,554 755,676 551,742 197,134 1,428,146 83,894 353,766 268,595 61,844 557,832 14,696	8.94 10.56 10.31 10.19 10.06 9.56 12.63 11.06 10.81 10.69 9.81 9.44 9.56 9.31 9.19 10.56 10.31 9.19 10.44 9.19 8.81 11.81 10.44
Balance carried forward			32,221,840	
			,,040	

DETAILS OF INVESTED FUNDS (continued)

	Interest <u>rate</u> Par value	Cost Net vield
REAL ESTATE MORTGAGES AND SBA LOANS (continued):		Cost Net yield
Conventional/residential mortgages serviced by (continued) -	**	
Balance brought forward		\$32,221,840
Alaska Mutual Savings Bank, Anchorage Alaska Mational Bank of Fairbanks Alaska National Bank of Fairbanks Alaska National Bank of Fairbanks Alaska National Bank of Fairbanks Peoples Bank & Trust Company, Anchorage Pe	10.50 10.00 9.625 9.50 11.00 10.50 12.00 11.00 10.50 12.00 10.50 10.25 10.00 10.00 9.75 9.75 9.625 9.50 9.375 9.125 11.00 10.75 10.50 10.25 10.50 10.25 10.50 10.25 10.50 10.25 10.50 10.25	301,103 10.31 79,500 9.69 319,800 9.31 59,671 9.19 765,737 11.00 536,771 10.31 416,347 12.00 10.81 416,347 10.19 12.00 10.81 1,000,000 12.00 157,967 10.19 188,232 9.94 225,521 10.06 295,927 9.69 213,563 9.81 540,596 9.44 264,382 9.56 72,686 9.31 1,202,635 9.19 52,771 8.81 1,202,635 9.19 52,771 8.81 144,711 10.81 134,444 10.56 499,548 10.31 81,941 9.94 68,488 9.44 216,750 10.31 675,000 10.19 500,000 10.44 836,217 9.69 304,107 9.81 492,808 9.31
		43,928,333

DETAILS OF INVESTED FUNDS (continued)

	Interest rate I	Par value	Cost	Net yield
REAL ESTATE MORTGACES AND SBA LOANS (continued):				
Conventional/residential mortgages serviced by (continued) -				
Balance brought forward			\$43 ,9 28 , 333	
United Bank Alaska United Bank Alaska United Bank Alaska United Bank Alaska	9.50 9.50 9.375 10.50		$\substack{1,820,053\\127,669\\831,781\\153,750}$	9.19 9.31 9.06 10.31
			46,861,586	
			<u>861,941,668</u>	

TEACHERS' RETIREMENT FUND Investment Summary June 30, 1977

	Cost <u>Value</u>	Market <u>Value</u>
Cash:		. •
Savings Deposits Due From Banks Total Cash	\$ 2,741,148 100,000 \$ 2,841,148	\$ 2,741,148 100,000 \$ 2,841,148
Short Term Debt Issues: Savings Certificates Total Short Term Debt Issues	\$ 1,162,000 \$ 1,162,000	\$ 1,161,825 \$ 1,161,825
Fixed Income Marketable Issues: U.S. Agency Securities U.S. Treasury Notes and Bonds Corporate Notes and Bonds Private Placements Total Fixed Income Marketable Issues	\$ 54,244,589 3,503,750 21,016,962 1,000,000 \$ 79,765,301	\$ 55,290,189 3,598,281 21,770,353 1,000,000 \$ 81,658,823
Loans and Mortgages: FHA Small Business Conventional Total Loans and Mortgages	\$ 9,039,518 6,040,563 46,861,588 \$ 61,941,669	\$ 8,775,689 5,820,902 48,395,847 \$ 62,992,438
Common Stock Account: Cash Short Term Debt Issue Fixed Income Issues Common Stock Total Common Stock Account	\$ 1,541,648 1,307,000 5,578,815 19,327,713 \$ 27,755,176	\$ 1,541,648 1,307,000 5,631,862 23,308,125 \$ 31,788,635
Total Investments	\$173,465,294	\$180,442,869

TEACHERS' RETIREMENT FUND Comparative Statement of Operations

	Fiscal Yea	ır Ended
	June 30, 1977	June 30, 1976
Beginning Equities and Reserves	\$137,623,382	\$105,797,313
Additions: Employees' Contributions: Mandatory Reinstatement Arrearage Retroactive Supplemental Retirement Option Payback Total Employees' Contributions	\$ 10,599,596 101,170 806,899 87,994 511,297 55,927 \$ 12,162,883	\$ 10,422,963 66,678 518,001 110,045 472,490 \$ 11,590,177
Employers' Contributions	11,701,480	9,632,759
State Contributions - Matching	12,328,750	9,715,677
Net Investment Income 1)	13,583,578	9,240,962
Interest Earned on Employees' Indebtedness	460,346	369,534
Total Additions	\$ 50,237,037	\$ 40,549,109
Total Equities, Reserves and Additions	\$187,860,419	\$146,346,422
Deductions: Administrative Expenses: Personal Services Travel Contractual Services Commodities Equipment Inter-Agency Service Total Administrative Expenses	\$ 236,369 12,679 73,846 2,301 1,607 166,900 \$ 493,702	\$ 192,396 10,515 71,646 1,809 2,452 127,600 \$ 406,418
Employees' Contributions and Interest Refunded	1,859,829	1,926,610
Retirement Benefits Paid	8,161,421	6,390,012
Total Deductions	\$ 10,514,952	\$ 8,723,040
Ending Equities and Reserves	\$177,345,467	\$137,623,382

TEACHERS' RETIREMENT FUND Footnotes to Comparative Statement of Operations

1) Schedule of Net Investment Income for Fiscal Year ended June 30, 1977.

Interest Income \$11,467.113
Gain/(Loss) on Sale of Securitites 2,116,465

Total Net Investment Income \$13,583,578

TEACHERS' RETIREMENT FUND . Analysis of Cash

General Ledger Cash on 6/30/77 Adjusted as of 8/31/77	\$ 3,975,242.03
Less Auditors' Adjustments	95,068.00
Sub-Total	\$ 3,880,174.03
Add Cash in Trustee Common Stock Account	804.02
Annual Report Cash Balance	\$ 3,880,978.01

MERCER

Benefit Services / Consulting Actuaries

October 11, 1977

Mr. B. B. Allen Commissioner of Administration State of Alaska Department of Administration Pouch CR Juneau, Alaska 99811

Actuarial Status Alaska Teachers' Retirement System

Dear Commissioner Allen:

This is a brief statement to outline the actuarial status of the Alaska Teachers' Retirement System. The actuarial valuation which we perform each year with respect to the Alaska Teachers' Retirement System has the following objectives:

- (1) To examine the status of funding of the System.
- (2) To develop a contribution rate which is adequate to support the benefits of the System.

The actuarial valuation of the Alaska Teachers' Retirement System as of June 30, 1977 is based upon actuarial assumptions and methods which are identical to those used in the prior valuation. The more significant results are as follows:

Contribution Rates

Contribution rates as a percent of earnings have decreased slightly, primarily due to greater than anticipated investment yields during the year. The following table summarizes those rates.

		Valuation <u>6-30-76</u>	Date 6-30-77
(1)	Basic System	12.43%	12.24%
(2)	Medical Benefit	63%	62%
(3)	Total Employer-State Contribution Rate	13.06%	12.86%

Mr. B. B. Allen Page Two October 11, 1977

Funding Progress

One of the best measures of a pension plan's funding progress is the growth of assets relative to the present value of accrued benefits. The greater-than-assumed investment yield of the fund during 1976/77 more than offset the effect of rapid growth in salaries during the year, thus leading to an increase in the accrued benefit funding ratio. The improvement in this ratio was dampened by the 10% PRPA which became effective July 1, 1977, thereby increasing liabilities by \$6,235,843.

		Valuati <u>6-30-76</u>	lon Date 6-30-77
(1)	Valuation Assets	\$134,471,807	\$182,062,858
(2)	Present Value of Accrued Benefits	244,460,953	315,383,056
(3)	Accrued Benefit Funding Ratio	55.0%	57.7%

A more complete analysis appears in the actuarial valuation report. In summary, it is our opinion that the funding progress of the System is satisfactory and the contribution levels are sufficient to support the benefits of the System.

Sincerely,

Robert F. Richardson, MAAA

Assistant Vice President

RFR:jn

Valuation of Liabilities

A. Actuarial Method - A type of Aggregate Method which spreads all unfunded liabilities as a level percent of salaries over 14 years.

B. Actuarial Assumptions -

(1) Interest 5% per annum, compounded annually, net of investment expenses.

(2) Salary Scale 4% per annum, compounded annually until age 39; 2% from 40 to 49; and 1% thereafter.

(3) Mortality 1951 Group Annuity Mortality Table with Projection "C" to 1965.

(4) Turnover In accordance with Table 1.

(5) Disability

Incidence rates in accordance with
Table 2. Post-disability mortality
in accordance with the 1944 Railroad Retirement experience rates.

(6) Retirement Age

Average of age 60 and the earliest age for which the member would be eligible for Normal Retirement benefits.

(7) Contribution Refunds

50% of those terminating after age
40 and 8 years of membership service
will receive their deferred vested
benefit; all others will take their
contributions upon termination before
retirement

(8) C.O.L.A. 40% will be eligible for C.O.L.A.

(9) Miscellaneous

All members are assumed to have one minor child; husbands are assumed to be 4 years older than their wife.

(10) Expenses No loading for expenses.

Valuation of Assets - Adjusted market basis using the three-year average relationship between market and book values.

TABLE 1

TEACHERS' RETIREMENT SYSTEM STATE OF ALASKA

SEPARATION RATES ANNUAL RATES PER 1,000 EMPLOYEES

<u>Age</u>	Rate	<u>Age</u>	Rate
20	165.0	40	100.0
21	162.0	41	95.0
22	160.0	42	90.0
23	158.0	43	85.0
24	155.0	44	80.0
25	152.0	45	75.0
26	149.5	46	70.0
27	146.0	47	65.0
28	142.5	48	60.0
29	140.0	49	55.0
30	137.0	50	45.0
31	132.5	51	35.0
32	130.0	52	25.0
33	127.5	53	15.0
34	125.0	54	5.0
35 36 37 38 39	120.0 116.0 112.0 108.0 104.0		

TABLE 2

TEACHERS' RETIREMENT SYSTEM STATE OF ALASKA

DISABILITY RATES ANNUAL RATES PER 1,000 EMPLOYEES

<u>Age</u>	Rate	<u>Age</u>	Rate
20	.70	45	1.62
21	.71	46	1.76
22	.72	47	1.91
23	.73	48	2.07
24	.74	4 9	2.23
25	.75	50	2.40
26	.76	51	2.60
27	.78	52	2.86
28	.80	53	3.18
29	.82	54	3.56
30	.84	55	4.00
31	.86	56	4.59
32	.88	57	5.34
33	.90	58	6.10
34	.93	59	7.20
35	.96	60	8.43
36	.99	61	9.75
37	1.03	62	11.30
38	1.07	63	13.05
39	1.11	64	14.90
40 41 42 43 44	1.15 1.20 1.27 1.36 1.48		·

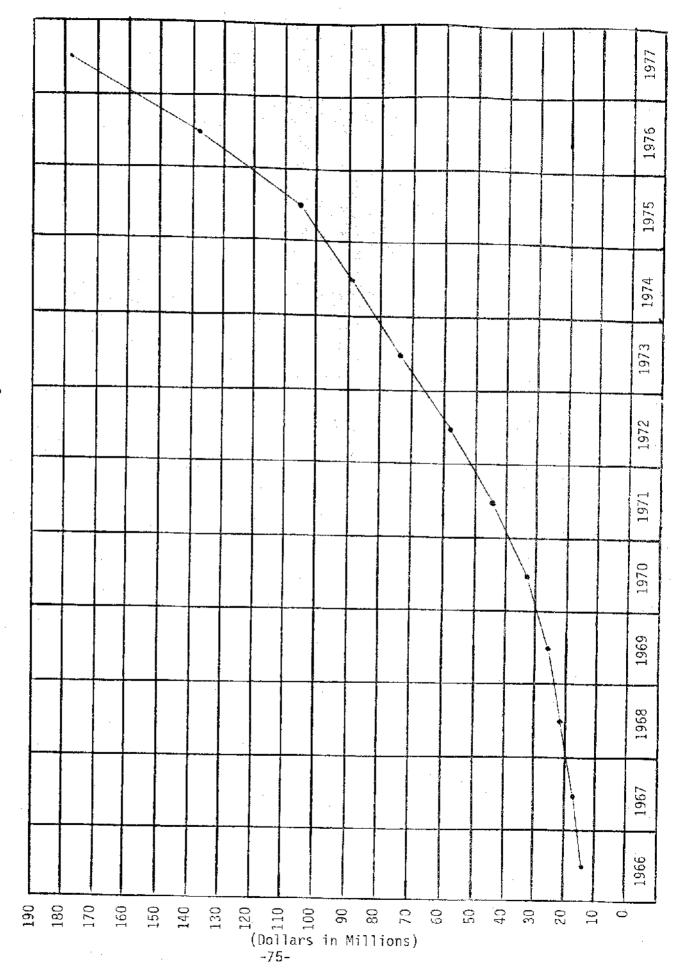
STATE OF ALASKA

TEACHERS' RETIREMENT FUND Historical Data Fiscal Years 1965 through 1977 (cents omitted)

13,583,5/8	1,859,829	8,161,421	12,162,883	24,030,230	177,345,467	1977
3,640,306	1,926,011	6,390,012	11,590,177	19,348,436	137,623,382	1976
1,844,1/3	1,896,431	4,574,494	9,147,206	11,526,213	105,797,313	1975
4,287,131	1,419,832	3,642,667	8,628,798	8,770,748	89,794,395	1974
3,181,537	1,312,958	2,493,491	6,820,652	9,543,907	73,979,377	1973
002,186,2	808,067	1,817,534	5,713,570	7,470,707	58,400,298	1972
0+0,661,2	641,652	1,057,714	5,284,693	6,408,602	44,985,043	1971
+/c,839,7/	644,974	907,777	2,622,059	3,854,210	32,867,233	1970
201,222,1	638,713	592,162	2,853,414	1,983,226	26,198,453	1969
8/1,1/8	532,155	402,205	2,002,459	1,864,630	21,397,071	1968
702,303	438,256	298,082	2,050,955	1,791,537	17,703,808	1967
532,/12	391,343	257,287	1,297,780	1,290,307	13,950,410	9961
\$ 479,150	\$ 363,594	\$ 216,260	\$ 1,200,977	\$ 1,262,117	\$ 11,525,883	1965
Fiscal Year	Fiscal Year	Death Benefits	During Fiscal Year	During Fiscal Year	Fiscal Year End	Fiscal Year
Investment Income During	and Interest Refunded	Paid Including	Employees' Contributions	Employers' Contributions	Assets	
Net ************	Contributions	Benefits				

STATE OF ALASKA

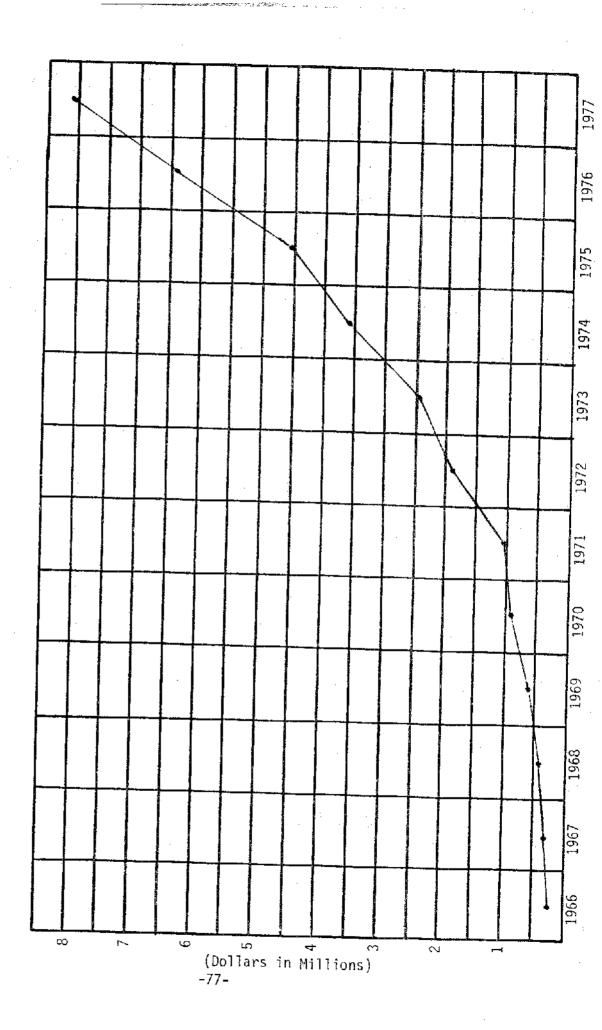
TEACHERS' RETIREMENT FUND Total Assets Fiscal Years 1966 through 1977



Employees Employers (Dollars in Millions) 22 20 18 9 Ø

STATE OF ALASKA

STATE OF ALASKA
TEACHERS' RETIREMENT FUND
Benefits Paid
Fiscal Years 1966 through 1977



TEACHERS' RETIREMENT FUND Employer Contribution Rates For Fiscal Year 1977

<u>Employer</u>	Percentage
Alaska Central Railbelt Schools Adak Region School District	7.09
Alaska, University of	
Alaska, University of, Geophysical Institute	i t
Aleutian Region School District	· 1
Anchorage School District	·
Annette Island School District Bering Straits School District	
Bristol Bay Borough School District	. 1
Bristol Bay Regional Resource Center	ı
Chatham School District	\$
Chugach Region School District	ŧ
Copper River School District	· · · · · · · · · · · · · · · · · · ·
Cordova School District	·
Craig School District	I ⁻
Delta-Greely School District	1
Department of Education, State of Alaska	same
Dillingham School District	਼ ਜੋ
Fairbanks North Star Borough School District	1
Galena City Schools	I.
Haines School District	ţ
Hoonah City Schools	ı
Hydaburg School District Iditarod Area School District	ι
Juneau Borough School District	1
Kake City Schools	
Kenai Peninsula Borough School District	,
Ketchikan Gateway Borough School District	
King Cove City Schools	
Klawock City Schools	10 T
Kodiak Island Borough School District	1
Kuspuk School District	t
Lake and Peninsula School District, The	·
Lower Kuskokwim School District	1
Lower Yukon School District	ı
Matanuska-Susitna Borough School District	1
National Education Association	1
Nenana School District Nome City Schools	<u>'</u>
North Slope Borough School District	<u>'</u>
Northwest Arctic School District	າ ໝ
Northwest Regional Resource Center	
Pelican School District	
Petersburg City Schools	1
Buibilet Degion School District	I

TEACHERS' RETIREMENT FUND Employer Contribution Rates For Fiscal Year 1977

continued -

Employer	Percentage
Selawik City School District Sitka Borough School District, Greater Skagway City School District Southeast Islands School District Southeastern Regional Resource Center Southcentral Regional Resource Center Southwest Region School District St. Mary's School District Unalaska School District Valdez City Schools Wrangell Public Shools Yakutat School District Yukon-Koyukuk School District	7.09 7. same for all
	,

